# Arizona Department of Administration

## Office of Employment & Population Statistics Employment Forecast



May 9, 2013

#### Arizona Employment Growth Continues on a Slower Track; Improvements in 2013 and 2014

#### Introduction

The Office of Employment and Population Statistics (EPS) within the Arizona Department of Administration (ADOA) is forecasting gradual gains in Nonfarm employment in Arizona for the 2013-2014 projections time period. In comparison to the employment forecast released earlier in November 2012, Nonfarm employment growth has been forecast to be slightly slower in 2013. An over-the-year gain of 46,500 Nonfarm jobs is expected in 2013 and 51,800 in 2014. The previous forecast in November 2012 was for a 60,900 job gain in 2013. In the current forecast, the rate of growth projected for total Nonfarm employment is 1.9 percent in 2013 and 2.1 percent in 2014. A total of 98,300 Nonfarm jobs are forecast to be gained over the two projected years (2013 & 2014) (Table 1).

The overall employment situation in Arizona is expected to improve although on a slower track. The economic fundamentals continue to improve, but appear to be dampened by the effects of sequestration and the payroll tax increase.

As per the Budget Control Act of 2011, the federal government enacted across-the-board budget cuts also known as sequestration followed by a continuing resolution that went into effect in March 2013. The objective was to reduce the federal government deficit and debt levels. Spending was reduced in both civilian and military programs. In addition, the payroll tax cuts of 2 percent expired in December 2012, bringing the rate back to the default of 6.2 percent as of January 2013. <sup>1</sup>

Table 1

### **Total Nonfarm Employment**

Annual Average Growth Rate

|                               | <b>2012</b> <sup>(a)</sup> | <b>2013</b> <sup>(b)</sup> | <b>2014</b> <sup>(b)</sup> |
|-------------------------------|----------------------------|----------------------------|----------------------------|
| Arizona                       | 2.0%                       | 1.9%                       | 2.1%                       |
| Phoenix MSA <sup>1</sup>      | 2.4%                       | 2.3%                       | 2.4%                       |
| Tucson MSA <sup>2</sup>       | 1.5%                       | 0.8%                       | 1.1%                       |
| Balance of State <sup>3</sup> | 0.6%                       | 0.8%                       | 1.4%                       |

- 1) Maricopa and Pinal counties
- 2) Pima County
- 3) Arizona less Maricopa, Pinal, and Pima counties
- a) Historical (BLS Current Employment Statistics)
- b) Forecast

**Table 1** shows the average annual growth rate in Total Nonfarm employment for Arizona, Phoenix MSA, Tucson MSA, and Balance of State. In 2013, all regions are forecast to have positive annual over-the-year growth rates in Nonfarm employment. Arizona is forecast to grow at 1.9% in 2013. Phoenix is expected to grow faster than the state at 2.3%. However, the projected growth rates for Tucson (0.8%) and the Balance of State (0.8%) are slower than the statewide and Phoenix MSA rates. The expected Nonfarm job gains in 2013 for the Phoenix MSA are 40,800 jobs, for Tucson MSA are 3,000 jobs, and for Balance of State are 2,700 jobs.

Growth rates in 2014 are expected to be higher than 2013 across all regions. Phoenix is forecast to continue growing at a faster pace (2.4%) than Tucson (1.1%), Balance of State (1.4%), and the state overall (2.1%). For 2014 the job gains forecast for Phoenix MSA are 43,200 jobs, Tucson MSA 3,900 jobs, and Balance of State 4,700 jobs. (See tables starting on page 8)

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<sup>&</sup>lt;sup>1</sup> See (a) IHS Global Insight. U.S. Forecast for September and October 2012. <u>at the website www.ihs.com/products/global-insight/index.aspx.</u> (b)Wells Fargo Economics Group. Monthly Outlook. October 2, 2012. at the website <u>www.wellsfargo.com/com/research/economics</u> (c) Wells Fargo Economics Group. Special Commentary. U.S. Fiscal Primer: The Deficit and Debt. August 2012. at the website <u>www.wellsfargo.com/com/research/economics</u>

<sup>(</sup>d) IHS Global Insight. U. S. Economy Article: The Fiscal Cliff: An Update. December 19, 2012 . at the website www.ihs.com/products/global-insight/index.aspx.

<sup>(</sup>e) The Pew Center on the States. Fiscal Federalism Initiative. The Impact of the Fiscal Cliff on the States. November 2012. at the website www.pewtrusts.org/fiscal-federalism.

Reduced spending and increased taxes are expected to lower the level of aggregate demand in the U.S. economy and slow the rate of

economic and employment growth. The housing market remains encouraging with continued increase in home prices in Arizona and other states.<sup>2</sup>

There are a number of factors that have helped the U.S. as well as Arizona economy gradually pickup and add jobs this past year. Although the general economic trends are expected to continue, sequestration is expected to lower the rate of growth in some of these indicators:

- Continued improvement in real Gross Domestic Product (GDP), real personal income at the state and national levels, employment, and retail sales.<sup>3</sup>
- Continued employment gains in the private sector, increasing private domestic investment, gradual increase in the index of industrial production and rate of capacity utilization, high levels of corporate profit, a gradual resurgence in private residential construction permits.<sup>4</sup>
- Continued gradual climb in household net worth, a continued decline in the fraction of disposable income used for household debt payments, and U.S. exports.<sup>5</sup>
- Residential real estate markets in Arizona and Phoenix metropolitan area are showing an improvement as measured by various indicators. These include rising levels of building permits. Also, the home prices in Arizona have been rising.
- While revolving consumer credit levels have remained flat, an expansion of non-revolving consumer credit since 2011 has served as an impetus to expanding economic activity. Consumer sentiment and consumer spending have shown signs of improvement, but the rate of growth has been slowing down.<sup>7</sup>

With an improving domestic economy and employment growth in the Private sector, consumers are expected to spend more. However, the impact of sequestration and payroll tax increase is expected to be felt through the economy slowing down the rate of economic activity and lowering the demand for goods and services slightly in the short run. Outside of the U.S., the economies of Asia and Latin America are also expected to

<sup>&</sup>lt;sup>2</sup> See FRED graphs and data for the variables: all-transactions house price index for the United States (USSTHPI); and all-transactions house price index for Arizona (AZSTHPI). at the website <a href="http://research.stlouisfed.org/fred2/">http://research.stlouisfed.org/fred2/</a>.

<sup>&</sup>lt;sup>3</sup> See FRED graphs and data for the variables: real gross domestic product, 1 decimal (GDPC1); real personal income (RPI); real disposable personal income (DSPIC96); total personal income in Arizona (AZOTOT); per capital personal income in Arizona (AZPCPI); and real retail and food services sales (RRSFS) at the website <a href="http://research.stlouisfed.org/fred2/">http://research.stlouisfed.org/fred2/</a>.

<sup>&</sup>lt;sup>4</sup> See FRED graphs and data for the variables: real gross private domestic investment, 3 decimal (GPDIC96); industrial production index (INDPRO); capacity utilization (TCU); capacity utilization – manufacturing (MCUMFN); corporate profits after tax (CP); new private housing units authorized by building permits - in structures with 1 unit (PERMIT1); privately owned housing starts authorized by building permits, 1-unit structures for Arizona (AZBP1FH); and new private housing units authorized by building permit for Arizona (AZBPPRIV) . at the website <a href="http://research.stlouisfed.org/fred2/">http://research.stlouisfed.org/fred2/</a>.

<sup>&</sup>lt;sup>5</sup> See FRED graphs and data for the variables: total net worth - balance sheet of households and nonprofit organizations (TNWBSHNO); total assets -balance sheet of households and nonprofit organizations (TABSHNO); owners' equity in household real estate - net worth - balance sheet of households and nonprofit organizations (OEHRENWBSHNO); total liabilities - balance sheet of households and nonprofit organizations (TLBSHNO); home mortgages - liabilities - balance sheet of households and nonprofit organizations (HMLBSHNO); debt outstanding domestic nonfinancial sectors - household, consumer credit sector (HCCSDODNS); debt outstanding domestic nonfinancial sectors - household, home mortgage sector (HHMSDODNS); household debt service payments as a percent of disposable personal income (TDSP); and real exports of goods & services, 1 decimal (EXPGSC1). at the website <a href="http://research.stlouisfed.org/fred2/">http://research.stlouisfed.org/fred2/</a>.

<sup>&</sup>lt;sup>6</sup> See FRED graphs and data for the variables: all-transactions house price index for the United States (USSTHPI); all-transactions house price index for Arizona (AZSTHPI); home price index for Phoenix, Arizona (PHXRNSA); new private housing units authorized by building permit for Phoenix-Mesa-Scottsdale, AZ (MSA) (PHOE004BPPRIV); privately owned housing starts authorized by building permits: 1-unit structures for Phoenix-Mesa-Scottsdale, AZ (MSA) (PHOE004BP1FHSA); privately owned housing starts authorized by building permits, 1-unit structures for Arizona (AZBP1FH); and new private housing units authorized by building permit for Arizona (AZBPPRIV); total private construction spending: residential (PRRESCONS); private residential fixed investment (PRFI); and real private residential fixed investment, 3 decimal (PRFIC96). at the website http://research.stlouisfed.org/fred2/.

<sup>&</sup>lt;sup>7</sup> See FRED graphs and data for the variables: total revolving credit owned and securitized, outstanding (REVOLSL); total nonrevolving credit owned and securitized, outstanding (NONREVSL); University of Michigan: consumer sentiment (UMCSENT); and real personal consumption expenditures (PCEC96). at the website <a href="http://research.stlouisfed.org/fred2/">http://research.stlouisfed.org/fred2/</a>.

grow at a slower pace during the forecast time period. These expanding foreign economies are projected to create lesser demand for exports that are fabricated in the U.S. and Arizona.<sup>8</sup>

Although signs of economic improvement continue, there are some domestic factors that could further dampen the growth of the local economy. However, the positive factors listed above outweigh the uncertainties in the sections described below in support of our forecast:

- Constrained budgets persist for a large majority of households. Despite some job growth and lowering in the unemployment rate, many consumers in the U.S. continue to face employment insecurity, lower wages and benefits, high levels of debt, and rising prices for essentials such as food, energy and health care that limits the amount of funds available for discretionary spending. Food prices are expected to ease in 2013, but fragilities persist with historic low levels in grain inventories and rising uncertainty about climate. 10
- The residential real estate market has improved. However, the commercial real estate sector continues to be weak. Signs of weakness include vacant commercial properties and non-performing loans.
- Although real business investment continues to grow, the rate of growth has slowed as a consequence of demand uncertainty. 12
- Public sector fiscal consolidation through spending reductions (March 2013) and tax increases (Jan 2013) to reduce debts have gone into effect. Reduced spending in both civilian and military programs and increased taxes are expected to lower the aggregate demand in the U.S. economy, thereby slowing the rate of economic and employment growth.<sup>13</sup>
- Arizona is one of the states in the nation most vulnerable to federal government expenditure reductions because of the large proportion of military spending in the state's economy.<sup>14</sup> Reductions in federal government expenditures are projected to have the greatest impact in the following major industry sectors: Manufacturing; Retail Trade; Professional and Business Services; and Government. Besides the federal government, state and local governments continue to have budget problems.<sup>15</sup>

<sup>&</sup>lt;sup>8</sup> See (a) IHS Global Insight U.S. Forecast for April 2013. at the website <a href="www.ihs.com/products/global-insight/index.aspx">www.ihs.com/products/global-insight/index.aspx</a>. (b) Wells Fargo Economics Group. Monthly Outlook. April 10, 2013. at the website <a href="www.wellsfargo.com/com/research/economics">www.wellsfargo.com/com/research/economics</a>.

See (a) Global Insight U.S. Forecast for April 2013. at the website <a href="www.ihs.com/products/global-insight/index.aspx.">www.ihs.com/products/global-insight/index.aspx.</a>
 (b) Wells Fargo Economics Group Monthly Outlook. April 10, 2013. at the website <a href="www.wellsfargo.com/com/research/economics.">www.wellsfargo.com/com/research/economics.</a>

<sup>&</sup>lt;sup>10</sup> See (a) The Financial Times. Food Prices Forecast to Start Easing. E. Terazono & G. Meyer. April 18, 2013. at the website <a href="www.ft.com">www.ft.com</a>. (b) The Guardian. UN Warns of Looming Worldwide Food Crisis in 2013. J. Vidal. October 13, 2012. at the website <a href="www.guardian.co.uk">www.guardian.co.uk</a>.

<sup>&</sup>lt;sup>11</sup> See (a) Wells Fargo Economics Group. Special Commentary. Commercial Real Estate Chartbook: Quarter 4. March 5, 2013. at the website www.wellsfargo.com/com/research/economics.

<sup>(</sup>b) Wells Fargo Economics Group. Existing Home Sales Fell Slightly in March. April 22, 2013. at the website www.wellsfargo.com/com/research/economics.

<sup>(</sup>c) IHS Global Insight. US Housing Market Recovery: Regional Perspective. February 19, 2013. at the website www.ihs.com/products/global-insight/index.aspx

<sup>&</sup>lt;sup>12</sup> See (a) See FRED graphs and data for the variable: real gross private domestic investment, 3 decimal (GPDIC96). at the website http://research.stlouisfed.org/fred2/.

<sup>(</sup>b)The New York Times. Recovery in US Is Lifting Profits, But Not Adding Jobs. N.D. Schwartz. March 3, 2013. at the website www.nytimes.com

<sup>&</sup>lt;sup>13</sup> See (a) Global Insight U.S. Forecast for April 2013. at the website <a href="www.ins.com/products/global-insight/index.aspx.">www.ins.com/products/global-insight/index.aspx.</a>
(b)Wells Fargo Economics Group. Monthly Outlook. April 10, 2013. at the website <a href="www.wellsfargo.com/com/research/economics">www.wellsfargo.com/com/research/economics</a>
(c) Wells Fargo Economics Group. Special Commentary. Economic Impact of Sequestration. February 25, 2013. at the website:
www.wellsfargo.com/com/research/economic.

<sup>&</sup>lt;sup>14</sup> See: (a) Wells Fargo Economics Group. Special Commentary. Sequestration: Which States Are Most Vulnerable?. February 18, 2013. at the website: www.wellsfargo.com/com/research/economic.

<sup>(</sup>b) Wells Fargo Economics Group. Special Commentary. Economic Impact of Sequestration. February 25, 2013. at the website: www.wellsfargo.com/com/research/economic.

<sup>&</sup>lt;sup>15</sup> See (a) Global Insight U.S. Forecast for April 2013. at the website <a href="www.ihs.com/products/global-insight/index.aspx">www.ihs.com/products/global-insight/index.aspx</a>.
(b) Wells Fargo Economics Group. Local Budgets Under Pressure: A Fiscal Outlook. September 25, 2012. at the website <a href="www.wellsfargo.com/com/research/economics">www.wellsfargo.com/com/research/economics</a>

<sup>(</sup>c) Center on Budget and Policy Priorities. Policy Basics: Where Do Our State Tax Dollars Go? April 12, 2013. at the website www.cbpp.org/reports.

<sup>(</sup>d) Center on Budget and Policy Priorities. Policy Basics: The ABC's of State Budgets. February 7, 2013. at the website www.cbpp.org/reports.

In addition to the factors listed above there is some uncertainty on the international front:

- Continued multiyear recessions in the Euro Monetary Zone economies along with the tightening of the fiscal policy in some of these economies could have a further dampening effect. Countries in the Euro Monetary Zone serve as an important market for U.S. exports. They also serve as a source of foreign investment funds for U.S. financial markets. Although trade with Arizona is limited, it exposes the U.S. to the risk of European financial and economic problems. 16
- Economic growth is slowing in the People's Republic of China (PRC) resulting from a reduced pace of expansion in China's export markets. Slowing growth in PRC could further decrease U.S. export demand.<sup>17</sup>

#### **Arizona Industry Employment Projections (2012 – 2014)**

**Table 2** describes the average over-the-year percentage change for each sector for 2012, 2013, and 2014 where 2012 is the base year and 2013 and 2014 are forecast years. For the 2012 – 2014 projections time period, job gains are projected in all major sectors of the Arizona economy with the exception of one sector. This would suggest a gradual slowdown in the rate of Nonfarm employment gains in 2013 compared to 2012 and a slight improvement in 2014. **Figure 1** (next page) lists the projected gains in employment from 2012 to 2014 in the Arizona economy. **Figure 2** lists job gains by percent for all sectors.

For the 2012 to 2014 forecast time period, the major sectors with the largest projected employment gains are: Leisure and Hospitality (18,100 jobs); Professional and Business Services (14,700 jobs); Trade, Transportation and Utilities (14,300 jobs); Educational and Health Services (14,300 jobs); Construction (12,200 jobs); Financial Activities (11,100 jobs); Government (6,800 jobs) and Manufacturing (4,800 jobs). Smaller gains are forecast for Information (1,300 jobs) and Natural Resources and Mining (900 jobs) sectors. The only major sector with a projected loss in employment for 2012 to 2014 is Other Services sector (400 jobs).

**Arizona Sector Employment** Average Annual Over-the-Year Change 2012<sup>(a)</sup> 2013<sup>(b)</sup> 2014<sup>(b)</sup> **Total Nonfarm** 2.0% 1.9% 2.1% Construction 4.3% 5.8% 4.5% Leisure & Hospitality 2.9% 3.0% 3.7% **Financial Activities** 3.0% 3.3% 2.9% 2.5% **Profess & Business Services** 1.8% 2.4% Educational & Health Svcs 2.9% 1.5% 2.3% 9.5% Natural Resources & Mining 5.1% 2.1% Information 3.2% 1.8% 1.7% Trade, Trans. & Utilities 1.1% 1.3% 1.7% Manufacturing 3.1% 1.9% 1.2%

0.6%

-2.6%

a) Historical (BLS Current Employment Statistics)

1.0%

-0.5%

0.7%

0.0%

Table 2

During the two-year forecast time period, the major industry sectors arranged in the descending order of growth rates are: Construction (10.5 percent); Natural Resources and Mining (7.3 percent); Leisure and Hospitality (6.8 percent); Financial Activities (6.3 percent); Professional and Business Services (4.2 percent);

Government

b) Forecast

Other Services

<sup>&</sup>lt;sup>16</sup> See (a) Global Insight U.S. Forecast for April 2013. at the website www.ihs.com/products/global-insight/index.aspx.
(b) Wells Fargo Economics Group. Monthly Outlook. April 10, 2013. at the website <a href="www.wellsfargo.com/com/research/economics">www.wellsfargo.com/com/research/economics</a>.
(c) Wells Fargo Economics Group. Special Commentary. Arizona: Back from the Brink. March 15, 2013. at the website www.wellsfargo.com/com/research/economics.

<sup>&</sup>lt;sup>17</sup> See (a) Global Insight U.S. Forecast for April 2013. at the website www.ihs.com/products/global-insight/index.aspx.
(b) Wells Fargo Economics Group. Monthly Outlook. April 10, 2013. at the website www.wellsfargo.com/com/research/economics.

and Educational and Health Services (3.9 percent). Relatively, slower rate of growth is projected for Information (3.5 percent); Manufacturing (3.1 percent); Trade, Transportation and Utilities (3.0 percent); and Government (1.7 percent). Other Services is the only major sector with forecast job losses (-0.5 percent).

**Leisure and Hospitality (L&H):** The L&H sector is projected to have an increase of 7,900 jobs (3.0 percent) in 2013 and 10,200 jobs (3.7 percent) in 2014. The sub-sectors with the largest projected job gains are Food Services and Drinking Places and Arts, Entertainment and Recreation. Despite a projected increase in employment from 2013 to 2014 in Leisure and Hospitality, job losses are forecast in the sub-sector of Accommodations. Sequestration cuts and tighter fiscal environment are expected to limit business related travel. However, domestic and international tourism demand is projected to bolster employment in the Leisure and Hospitality sector.

**Professional and Business Services (PBS)**: The PBS sector is projected to have an increase of 6,200 jobs (1.8 percent) in 2013 and 8,500 jobs (2.4 percent) in 2014. The sub-sectors with the largest projected job gains over the projection period include Employment Services, Business Support Services and Services to Buildings and Dwellings. Business firms are expected to hire contingent labor as a lower-cost means to expand output during these uncertain times. All sub-sectors in PBS are projected to gain employment during the two-year forecast period.

**Trade, Transportation and Utilities (TTU)**: The TTU sector is forecast to gain 6,300 jobs (1.3 percent) in 2013 and 8,000 jobs (1.7 percent) in 2014. Wholesale Trade is the TTU sub-sector with the largest projected gains in employment, while some gains in Retail Trade sector are expected. However, job losses are forecast in the sub-sectors of Transportation, Warehousing and Utilities. In the Retail Trade sub-sectors, Motor Vehicles and Parts Dealers along with the Building Material and Garden Supply Stores subsectors are expected to have the largest projected increases in employment. However, employment reductions are projected in the Retail Trade sub-sectors of Food and Beverage Stores. In the Transportation, Warehousing and Utilities sub-sectors, Air Transportation is forecast to have the largest job losses as a consequence of industry consolidation. However, employment gains are projected in the sub-sectors of Truck Transportation and Utilities.

**Educational and Health Services (EHS)**: The EHS sector is forecast to gain 5,700 jobs (1.5 percent) in 2013 and 8,600 jobs (2.3 percent) in 2014. The largest projected increase in employment is forecast in the sub-sector of Ambulatory Health Care Services. Increases are also expected in Nursing and Residential Care Services and Social Assistance sectors. Government spending reductions have the potential to curtail growth. Hospitals are projected to have job losses in 2013 and remain flat in 2014. Private Educational Services sub-sector is forecast to have reductions in employment as more people leave school to re-enter the workforce as the economy gradually improves.

**Construction:** This sector is forecast to gain 6,700 jobs (5.8 percent) in 2013 and 5,500 jobs (4.5 percent) in 2014. The largest forecast job gains from 2012 to 2014 are in the sub-sectors of Specialty Trades followed by Building Construction. Job gains are forecast across all Construction sub-sectors. Repair and maintenance activities, new infrastructure projects such as the expansion of light rail in Phoenix and the development of new metal-ore mines are expected to bolster employment in Construction. The vacant properties in residential and commercial real estate are anticipated to slow the growth of employment in Building Construction sub-sector.

| Figure 1<br>2012 to 2014 Job Gains by Sector,<br>in thousands |               | Figure 2<br>2012 to 2014 Job Gains by Sector,<br>percentage |       |       |                            |
|---|---------------|---|-------|-------|----------------------------|
|   | 18,100        | Leisure & Hospitality                                       |       | 10.5% | Construction               |
|   | 14,700        | Profess& Business Svcs                                      |       | 7.3%  | Natural Resources & Minin  |
|   | 14,300        | Trade, Trans., & Utilities                                  |       | 6.8%  | Leisure & Hospitality      |
|   | 14,300        | Education & Health Svcs                                     |       | 6.3%  | Financial Activities       |
|   | 12,200        | Construction  |       | 4.2%  | Profess & Business Svcs    |
|   | 11,100        | Financial Activities  |       | 3.9%  | Education & Health Svcs    |
|   | <b>6,8</b> 00 | Government  |       | 3.5%  | Information                |
|   | 4,800         | Manufacturing   |       | 3.1%  | Manufacturing              |
|   | 1,300         | Information   |       | 3.0%  | Trade, Trans., & Utilities |
|   | 900           | Natural Resources & Mining                                  |       | 1.7%  | Government                 |
| -400  |               | Other Services  | -0.5% |       | Other Services             |

**Financial Activities (FA)**: This sector is projected to have an employment increase of 5,800 jobs (3.3 percent) in 2013 and 5,300 jobs (2.9 percent) in 2014. During the 2013 to 2014 forecast time frame, the subsectors with the largest projected gains in employment are: Credit Intermediation and Monetary Authorities; Insurance, Funds and Trusts; Real Estate, Rental and Leasing; and Securities, Commodities Contracts, and Investments.

**Government**: This sector is forecast to gain 3,900 jobs (1.0 percent) in 2013 and 2,900 jobs (0.7 percent) in 2014. The majority of projected increases in employment from 2011 to 2013 are expected in the sub-sectors of public education at the State <sup>18</sup> and Local Government levels. However, job losses are projected for the Federal Government.

**Manufacturing:** This sector is projected have an employment increase of 2,900 jobs (1.9 percent) in 2013 and 1,900 jobs (1.2 percent) in 2014. From 2012 to 2014, job gains are forecast across Durable Goods sectors that include Fabricated Metal Products, Aerospace Products and Parts, and Computer and Electronic Products. Non-Durable goods sector is also forecast to gain employment.

**Information:** This sector is projected to have a gain in employment of 700 jobs (1.8 percent) in 2013 and an increase in employment of 600 jobs (1.7 percent) in 2014. During the 2012 to 2014 projections time frame, slowing job gains are forecast in both the Telecommunications and Non-Telecommunications sub-sectors.

**Natural Resources and Mining (NRM):** The NRM sector is forecast to gain 600 jobs (5.1 percent) in 2013 and 300 jobs (2.1 percent) in 2014. From 2012 to 2014, slowing job gains are projected in the Natural

<sup>&</sup>lt;sup>18</sup> See State of Arizona Board of Regents. Table 2:Enrollments for Fall Semester: Headcounts and Full-Time Equivalents (21<sup>st</sup> Day). Academic Affairs Committee Meeting. December 5, 2012. Agenda Item #6A. Page 5.

Resource and Mining sectors. A slow down in economic growth in Asia and multiyear recession in Europe are expected to reduce the export demand. However, the development of new mining projects in the rural regions of Arizona is expected to create employment gains in Natural Resources and Mining sector overall.

**Other Services (OS):** OS is forecast to lose 400 jobs (-0.5 percent) in 2013 and remain flat in 2014. Continued employment uncertainty, reduced wages and benefits, large consumer and mortgage debt, and rising food, energy and health care costs have reduced the amount consumers give as charitable contributions to various establishments. These establishments include foundations or charitable trusts, religious, professional, and civic organizations, etc. These projected losses in employment in the OS sector reflect the reductions in revenues to these establishments.

#### Conclusion

Arizona is projected to gain 98,300 Nonfarm jobs, representing a growth rate of 4.0 percent, over the two projected years of 2013 and 2014. An over-the-year gain of 46,500 jobs is projected in 2013 and 51,800 jobs in 2014. The rate of growth projected for Nonfarm employment is 1.9 percent in 2013 and 2.1 percent in 2014.

The overall employment situation in Arizona is expected to improve although on a slower track. The housing market remains encouraging with continued increase in home prices in Arizona and other states. Public sector fiscal consolidation through spending reductions (sequestration) and payroll tax increases to reduce debts went into effect early this year. Reduced spending in both civilian and military programs and increased taxes are expected to lower the aggregate demand in the U.S. economy, thereby slowing the rate of economic and employment growth. The economic fundamentals continue to improve, but appear to be dampened by the effects of sequestration and the payroll tax increase.

All sectors of the Arizona economy are projected to gain jobs during the 2012-2014 forecast time period with the exception of Other Services sector. For the 2012 to 2014 forecast time period, the major sectors with the largest projected employment gains include: Leisure and Hospitality (18,100 jobs); Professional and Business Services (14,700 jobs); Trade, Transportation and Utilities (14,300 jobs); Educational and Health Services (14,300 jobs); Construction (12,200 jobs); Financial Activities (11,100 jobs); Government (6,800 jobs) and Manufacturing (4,800 jobs). Relatively, smaller gains are projected in Information (1,300 jobs) and Natural Resources and Mining (900 jobs) sectors. The only major sector with a projected loss in employment for 2012 to 2014 is Other Services (400 jobs) sector.

The growth rate over the 2012-2014 forecast time period for various sectors in descending order of magnitude are: Construction (10.5 percent); Natural Resources and Mining (7.3 percent); Leisure and Hospitality (6.8 percent); Financial Activities (6.3 percent); Professional and Business Services (4.2 percent); Educational and Health Services (3.9 percent); Information (3.5 percent); Trade, Transportation and Utilities (3 percent); Manufacturing (3.1 percent) and Government (1.7 percent). Other Services is forecast to have a loss (-0.5 percent).

There are risks that could add uncertainty to the forecast. Constrained budgets persist for a large majority of households. Despite some job growth and lowering in the unemployment rate, many consumers in the U.S. continue to face employment insecurity, lower wages and high debt. Rising prices for essentials could absorb a greater fraction of household spending, leaving less disposable income.

In the domestic economy, constrained federal, state, and local budgets could inhibit growth. Although the residential real estate market has improved, the commercial real estate sector continues to be weak, which could pose additional risk.

Continued multi-year recessions in the Euro Monetary Zone economies along with the tightening of the fiscal policy has the potential to depress economic activity further by reducing European demand for exports, thus contributing to a slowing of economic growth in many parts of the world. Economic growth is slowing in Asia and Latin America which could reduce imports from the U.S.

There are many positive indicators suggesting improvement in the overall economy such as GDP, employment, industrial production, wholesale and retail sales, capacity utilization rate, household net worth, rising income levels, increasing consumer spending, gradual improvements in residential real estate markets, and increasing levels of private domestic investment among others. However there are also risks associated with uncertainties as mentioned above. Overall, with Nonfarm employment gains projected across ten of the eleven major sectors in 2012-2014, this forecast suggests that the positives outweigh the risks.

## **Arizona Employment Forecast**

(In Thousands)

|                                    | Historical |        |        | Forecast |        |  |
|------------------------------------|------------|--------|--------|----------|--------|--|
|                                    | 2010       | 2011   | 2012   | 2013     | 2014   |  |
| Total Nonfarm Employment           | 2385.8     | 2411.4 | 2460.3 | 2506.8   | 2558.6 |  |
| Numerical Change                   | -46.8      | 25.6   | 48.9   | 46.5     | 51.8   |  |
| Percent Change                     | -1.9%      | 1.1%   | 2.0%   | 1.9%     | 2.1%   |  |
| Manufacturing                      | 148.5      | 150.5  | 155.2  | 158.1    | 160.0  |  |
| Numerical Change                   | -5.3       | 2.0    | 4.7    | 2.9      | 1.9    |  |
| Percent Change                     | -3.4%      | 1.3%   | 3.1%   | 1.9%     | 1.2%   |  |
| Natural Resources & Mining         | 10.9       | 11.6   | 12.7   | 13.3     | 13.6   |  |
| Numerical Change                   | -0.2       | 0.7    | 1.1    | 0.6      | 0.3    |  |
| Percent Change                     | -1.8%      | 6.4%   | 9.5%   | 5.1%     | 2.1%   |  |
| Construction                       | 111.5      | 110.9  | 115.7  | 122.4    | 127.9  |  |
| Numerical Change                   | -17.2      | -0.6   | 4.8    | 6.7      | 5.5    |  |
| Percent Change                     | -13.4%     | -0.5%  | 4.3%   | 5.8%     | 4.5%   |  |
| Trade, Transportation, & Utilities | 467.8      | 473.1  | 478.5  | 484.8    | 492.8  |  |
| Numerical Change                   | -10.6      | 5.3    | 5.4    | 6.3      | 8.0    |  |
| Percent Change                     | -2.2%      | 1.1%   | 1.1%   | 1.3%     | 1.7%   |  |
| Information                        | 36.4       | 37.0   | 38.2   | 38.9     | 39.5   |  |
| Numerical Change                   | -1.6       | 0.6    | 1.2    | 0.7      | 0.6    |  |
| Percent Change                     | -4.2%      | 1.6%   | 3.2%   | 1.8%     | 1.7%   |  |
| Financial Activities               | 167.6      | 171.3  | 176.5  | 182.3    | 187.6  |  |
| Numerical Change                   | -2.5       | 3.7    | 5.2    | 5.8      | 5.3    |  |
| Percent Change                     | -1.5%      | 2.2%   | 3.0%   | 3.3%     | 2.9%   |  |
| Professional & Business Services   | 339.8      | 345.9  | 354.4  | 360.6    | 369.1  |  |
| Numerical Change                   | -6.3       | 6.1    | 8.5    | 6.2      | 8.5    |  |
| Percent Change                     | -1.8%      | 1.8%   | 2.5%   | 1.8%     | 2.4%   |  |
| Educational & Health Services      | 344.8      | 355.9  | 366.2  | 371.9    | 380.5  |  |
| Numerical Change                   | 10.9       | 11.1   | 10.3   | 5.7      | 8.6    |  |
| Percent Change                     | 3.3%       | 3.2%   | 2.9%   | 1.5%     | 2.3%   |  |
| Leisure & Hospitality              | 253.9      | 259.3  | 266.7  | 274.6    | 284.8  |  |
| Numerical Change                   | -2.1       | 5.4    | 7.4    | 7.9      | 10.2   |  |
| Percent Change                     | -0.8%      | 2.1%   | 2.9%   | 3.0%     | 3.7%   |  |
| Other Services                     | 88.2       | 87.9   | 85.6   | 85.2     | 85.2   |  |
| Numerical Change                   | -5.2       | -0.3   | -2.3   | -0.4     | 0.0    |  |
| Percent Change                     | -5.6%      | -0.3%  | -2.6%  | -0.5%    | 0.0%   |  |
| Government                         | 416.3      | 408.1  | 410.7  | 414.6    | 417.5  |  |
| Numerical Change                   | -6.7       | -8.2   | 2.6    | 3.9      | 2.9    |  |
| Percent Change                     | -1.6%      | -2.0%  | 0.6%   | 1.0%     | 0.7%   |  |

Note - All figures are annual averages rounded to the nearest tenth for percentage change or the nearest hundred for employment. Numerical change and percent change are based on the difference from the previous year's annual average employment.

## Phoenix-Mesa-Glendale\* MSA Employment Forecast

(In Thousands)

|                                    | Historical |        |        | Forecast |        |  |
|------------------------------------|------------|--------|--------|----------|--------|--|
|                                    | 2010       | 2011   | 2012   | 2013     | 2014   |  |
| Total Nonfarm Employment           | 1690.4     | 1715.6 | 1757.1 | 1797.9   | 1841.1 |  |
| Numerical Change                   | -33.1      | 25.2   | 41.5   | 40.8     | 43.2   |  |
| Percent Change                     | -1.9%      | 1.5%   | 2.4%   | 2.3%     | 2.4%   |  |
| Manufacturing                      | 110.7      | 112.8  | 117.0  | 119.8    | 121.5  |  |
| Numerical Change                   | -4.2       | 2.1    | 4.2    | 2.8      | 1.7    |  |
| Percent Change                     | -3.7%      | 1.9%   | 3.7%   | 2.4%     | 1.4%   |  |
| Natural Resources & Mining         | 3.0        | 3.3    | 3.7    | 4.0      | 4.0    |  |
| Numerical Change                   | -0.1       | 0.3    | 0.4    | 0.3      | 0.1    |  |
| Percent Change                     | -3.2%      | 10.0%  | 12.1%  | 7.0%     | 2.0%   |  |
| Construction                       | 82.4       | 83.1   | 87.8   | 93.1     | 97.7   |  |
| Numerical Change                   | -13.6      | 0.7    | 4.7    | 5.3      | 4.6    |  |
| Percent Change                     | -14.2%     | 0.8%   | 5.7%   | 6.0%     | 4.9%   |  |
| Trade, Transportation, & Utilities | 345.9      | 350.1  | 356.8  | 363.8    | 371.4  |  |
| Numerical Change                   | -8.4       | 4.2    | 6.7    | 7.0      | 7.5    |  |
| Percent Change                     | -2.4%      | 1.2%   | 1.9%   | 2.0%     | 2.1%   |  |
| Information                        | 27.4       | 28.4   | 29.5   | 30.2     | 30.9   |  |
| Numerical Change                   | -1.5       | 1.0    | 1.1    | 0.7      | 0.7    |  |
| Percent Change                     | -5.2%      | 3.6%   | 3.9%   | 2.5%     | 2.2%   |  |
| Financial Activities               | 138.9      | 143.0  | 147.6  | 152.6    | 157.2  |  |
| Numerical Change                   | -2.0       | 4.1    | 4.6    | 5.0      | 4.7    |  |
| Percent Change                     | -1.4%      | 3.0%   | 3.2%   | 3.4%     | 3.1%   |  |
| Professional & Business Services   | 270.7      | 276.4  | 283.7  | 290.1    | 297.8  |  |
| Numerical Change                   | -4.3       | 5.7    | 7.3    | 6.4      | 7.7    |  |
| Percent Change                     | -1.6%      | 2.1%   | 2.6%   | 2.2%     | 2.7%   |  |
| Educational & Health Services      | 239.1      | 247.6  | 255.1  | 259.8    | 266.1  |  |
| Numerical Change                   | 10.5       | 8.5    | 7.5    | 4.7      | 6.3    |  |
| Percent Change                     | 4.6%       | 3.6%   | 3.0%   | 1.8%     | 2.4%   |  |
| Leisure & Hospitality              | 173.4      | 177.8  | 183.0  | 188.3    | 195.5  |  |
| Numerical Change                   | -1.1       | 4.4    | 5.2    | 5.3      | 7.2    |  |
| Percent Change                     | -0.6%      | 2.5%   | 2.9%   | 2.9%     | 3.8%   |  |
| Other Services                     | 64.0       | 63.9   | 61.9   | 61.9     | 62.0   |  |
| Numerical Change                   | -4.2       | -0.1   | -2.0   | 0.0      | 0.1    |  |
| Percent Change                     | -6.2%      | -0.2%  | -3.1%  | 0.0%     | 0.2%   |  |
| Government                         | 234.8      | 229.2  | 230.9  | 234.4    | 237.1  |  |
| Numerical Change                   | -4.4       | -5.6   | 1.7    | 3.5      | 2.7    |  |
| Percent Change                     | -1.8%      | -2.4%  | 0.7%   | 1.5%     | 1.2%   |  |

Note - All calculations are based on actual figures and then rounded to the nearest tenth for percentage change or the nearest hundred for employment.

<sup>\*</sup>Phoenix-Mesa-Glendale MSA includes all of Maricopa and Pinal Counties

## **Tucson MSA Employment Forecast**

(In Thousands)

|                                    | Historical |       |       | Forecast |       |  |
|------------------------------------|------------|-------|-------|----------|-------|--|
|                                    | 2010       | 2011  | 2012  | 2013     | 2014  |  |
| Total Nonfarm Employment           | 354.0      | 355.5 | 360.8 | 363.8    | 367.7 |  |
| Numerical Change                   | -7.8       | 1.5   | 5.3   | 3.0      | 3.9   |  |
| Percent Change                     | -2.2%      | 0.4%  | 1.5%  | 0.8%     | 1.1%  |  |
| Manufacturing                      | 24.0       | 23.4  | 23.3  | 23.2     | 23.2  |  |
| Numerical Change                   | -1.1       | -0.6  | -0.1  | -0.1     | 0.0   |  |
| Percent Change                     | -4.4%      | -2.5% | -0.4% | -0.6%    | 0.0%  |  |
| Natural Resources & Mining         | 1.8        | 1.9   | 2.1   | 2.3      | 2.4   |  |
| Numerical Change                   | 0.1        | 0.1   | 0.2   | 0.2      | 0.1   |  |
| Percent Change                     | 5.9%       | 5.6%  | 10.5% | 9.0%     | 5.0%  |  |
| Construction                       | 15.0       | 14.5  | 14.3  | 15.3     | 15.8  |  |
| Numerical Change                   | -1.6       | -0.5  | -0.2  | 1.0      | 0.4   |  |
| Percent Change                     | -9.6%      | -3.3% | -1.4% | 7.3%     | 2.8%  |  |
| Trade, Transportation, & Utilities | 56.9       | 57.7  | 57.7  | 57.9     | 58.1  |  |
| Numerical Change                   | -1.3       | 0.8   | 0.0   | 0.2      | 0.2   |  |
| Percent Change                     | -2.2%      | 1.4%  | 0.0%  | 0.3%     | 0.4%  |  |
| Information                        | 4.3        | 4.2   | 4.3   | 4.2      | 4.1   |  |
| Numerical Change                   | -0.4       | -0.1  | 0.1   | -0.1     | 0.0   |  |
| Percent Change                     | -8.5%      | -2.3% | 2.4%  | -3.0%    | -1.0% |  |
| Financial Activities               | 18.9       | 18.8  | 18.9  | 19.3     | 19.6  |  |
| Numerical Change                   | 0.2        | -0.1  | 0.1   | 0.4      | 0.2   |  |
| Percent Change                     | 1.1%       | -0.5% | 0.5%  | 2.2%     | 1.2%  |  |
| Professional & Business Services   | 45.7       | 46.7  | 48.2  | 47.4     | 47.6  |  |
| Numerical Change                   | -1.4       | 1.0   | 1.5   | -0.8     | 0.2   |  |
| Percent Change                     | -3.0%      | 2.2%  | 3.2%  | -1.6%    | 0.3%  |  |
| Educational & Health Services      | 58.3       | 59.8  | 61.0  | 61.0     | 61.9  |  |
| Numerical Change                   | -0.2       | 1.5   | 1.2   | 0.0      | 0.9   |  |
| Percent Change                     | -0.3%      | 2.6%  | 2.0%  | 0.0%     | 1.5%  |  |
| Leisure & Hospitality              | 38.1       | 39.1  | 40.4  | 41.6     | 42.9  |  |
| Numerical Change                   | -0.6       | 1.0   | 1.3   | 1.2      | 1.3   |  |
| Percent Change                     | -1.6%      | 2.6%  | 3.3%  | 3.0%     | 3.1%  |  |
| Other Services                     | 12.7       | 12.5  | 12.7  | 12.4     | 12.4  |  |
| Numerical Change                   | -0.7       | -0.2  | 0.2   | -0.3     | 0.0   |  |
| Percent Change                     | -5.2%      | -1.6% | 1.6%  | -2.0%    | 0.0%  |  |
| Government                         | 78.2       | 76.8  | 78.0  | 79.2     | 79.8  |  |
| Numerical Change                   | -0.9       | -1.4  | 1.2   | 1.2      | 0.7   |  |
| Percent Change                     | -1.1%      | -1.8% | 1.6%  | 1.5%     | 0.8%  |  |

Note - All calculations are based on actual figures and then rounded to the nearest tenth for percentage change or the nearest hundred for employment.

<sup>\*</sup>Tucson MSA includes all of Pima County

## **Balance of State\* Employment Forecast**

(In Thousands)

|                                    | <u> Historical</u> |       | <u>Forecast</u> |       |       |
|------------------------------------|--------------------|-------|-----------------|-------|-------|
|                                    | 2010               | 2011  | 2012            | 2013  | 2014  |
| Total Nonfarm Employment           | 341.4              | 340.3 | 342.4           | 345.1 | 349.8 |
| Numerical Change                   | -5.9               | -1.1  | 2.1             | 2.7   | 4.7   |
| Percent Change                     | -1.7%              | -0.3% | 0.6%            | 0.8%  | 1.4%  |
| Manufacturing                      | 13.8               | 14.3  | 14.9            | 15.2  | 15.4  |
| Numerical Change                   | 0.0                | 0.5   | 0.6             | 0.3   | 0.2   |
| Percent Change                     | 0.0%               | 3.6%  | 4.2%            | 1.7%  | 1.5%  |
| Natural Resources & Mining         | 6.1                | 6.4   | 6.9             | 7.1   | 7.2   |
| Numerical Change                   | -0.2               | 0.3   | 0.5             | 0.2   | 0.1   |
| Percent Change                     | -3.2%              | 4.9%  | 7.8%            | 2.8%  | 1.2%  |
| Construction                       | 14.1               | 13.3  | 13.6            | 14.0  | 14.5  |
| Numerical Change                   | -2.0               | -0.8  | 0.3             | 0.4   | 0.5   |
| Percent Change                     | -12.4%             | -5.7% | 2.3%            | 2.8%  | 3.4%  |
| Trade, Transportation, & Utilities | 65.0               | 65.3  | 64.0            | 63.1  | 63.4  |
| Numerical Change                   | -0.9               | 0.3   | -1.3            | -0.9  | 0.3   |
| Percent Change                     | -1.4%              | 0.5%  | -2.0%           | -1.4% | 0.5%  |
| Information                        | 4.7                | 4.4   | 4.4             | 4.5   | 4.5   |
| Numerical Change                   | 0.3                | -0.3  | 0.0             | 0.1   | 0.0   |
| Percent Change                     | 6.8%               | -6.4% | 0.0%            | 1.3%  | 0.7%  |
| Financial Activities               | 9.8                | 9.5   | 10.0            | 10.4  | 10.8  |
| Numerical Change                   | -0.7               | -0.3  | 0.5             | 0.4   | 0.4   |
| Percent Change                     | -6.7%              | -3.1% | 5.3%            | 4.4%  | 3.4%  |
| Professional & Business Services   | 23.4               | 22.8  | 22.5            | 23.1  | 23.8  |
| Numerical Change                   | -0.6               | -0.6  | -0.3            | 0.6   | 0.6   |
| Percent Change                     | -2.5%              | -2.6% | -1.3%           | 2.9%  | 2.7%  |
| Educational & Health Services      | 47.4               | 48.5  | 50.1            | 51.1  | 52.5  |
| Numerical Change                   | 0.6                | 1.1   | 1.6             | 1.0   | 1.5   |
| Percent Change                     | 1.3%               | 2.3%  | 3.3%            | 2.0%  | 2.9%  |
| Leisure & Hospitality              | 42.4               | 42.4  | 43.3            | 44.7  | 46.4  |
| Numerical Change                   | -0.4               | 0.0   | 0.9             | 1.4   | 1.7   |
| Percent Change                     | -0.9%              | 0.0%  | 2.1%            | 3.3%  | 3.8%  |
| Other Services                     | 11.5               | 11.5  | 11.0            | 10.8  | 10.7  |
| Numerical Change                   | -0.3               | 0.0   | -0.5            | -0.2  | -0.1  |
| Percent Change                     | -2.5%              | 0.0%  | -4.3%           | -1.6% | -1.1% |
| Government                         | 103.3              | 102.1 | 101.8           | 101.1 | 100.6 |
| Numerical Change                   | -1.4               | -1.2  | -0.3            | -0.7  | -0.4  |
| Percent Change                     | -1.3%              | -1.2% | -0.3%           | -0.7% | -0.4% |

Note - All calculations are based on actual figures and then rounded to the nearest tenth for percentage change or the nearest hundred for employment.

<sup>\*</sup>Balance of state includes all areas in Arizona outside of the Phoenix and Tucson Metro areas (MSAs)

Figure 3

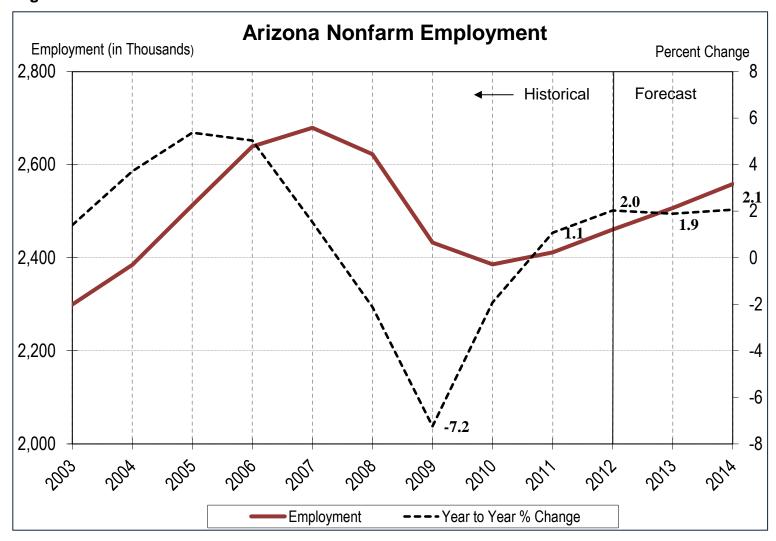


Figure 4

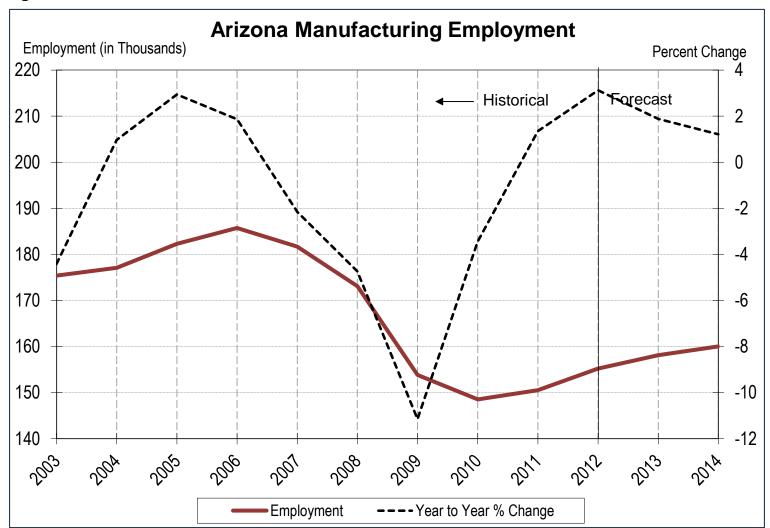


Figure 5

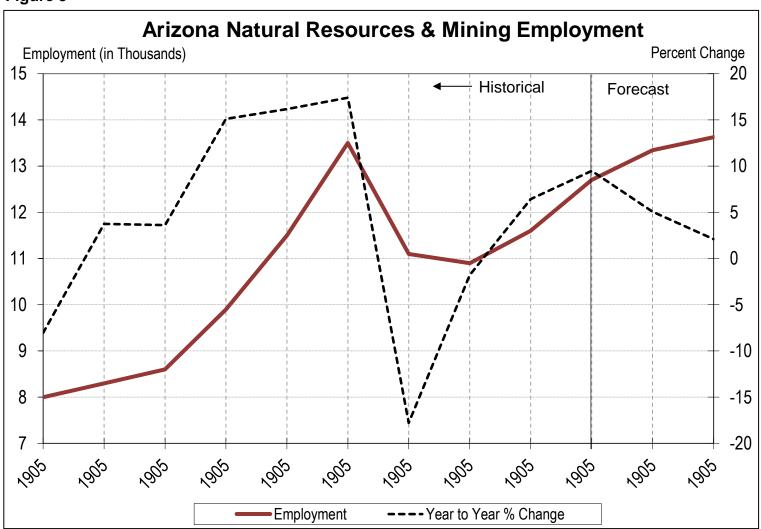


Figure 6

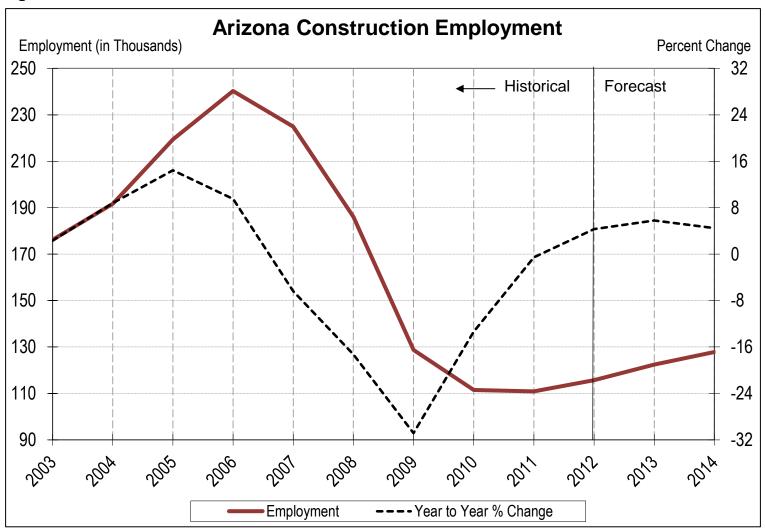
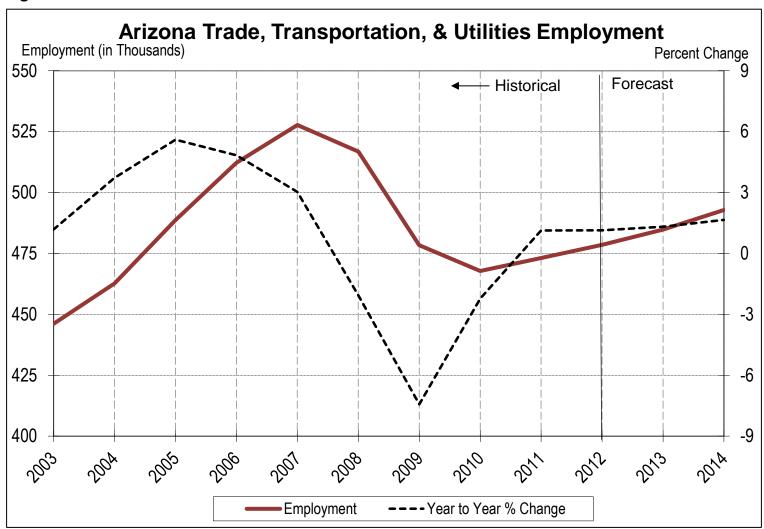


Figure 7



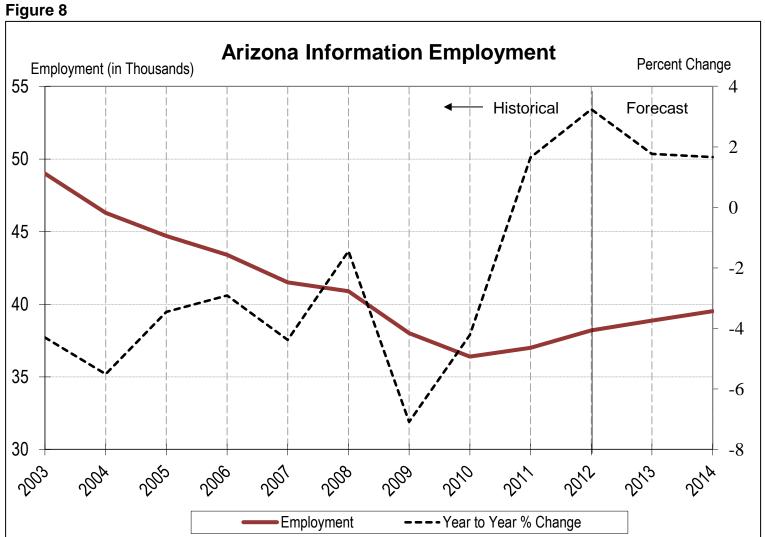


Figure 9

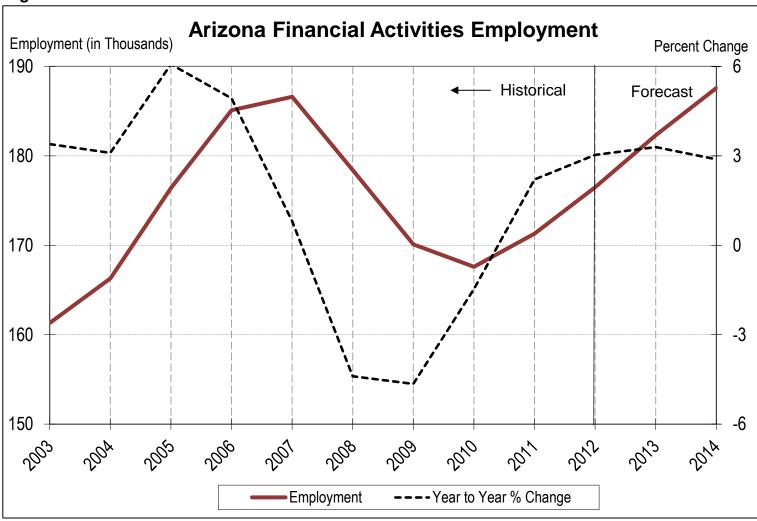


Figure 10

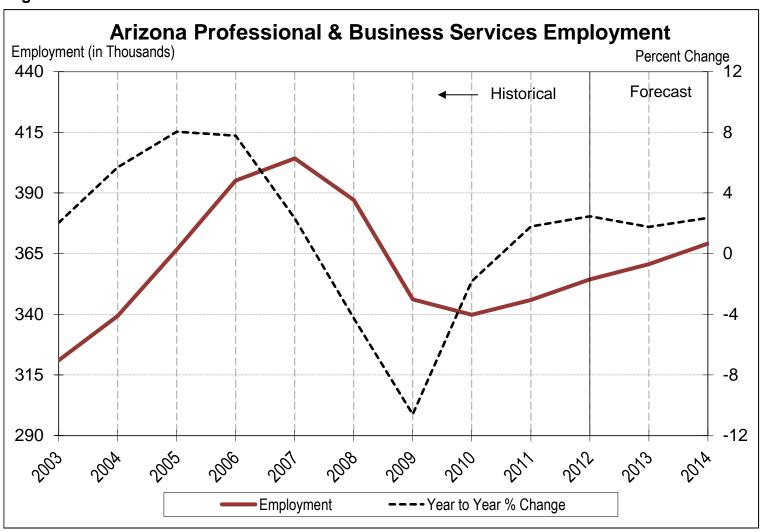


Figure 11

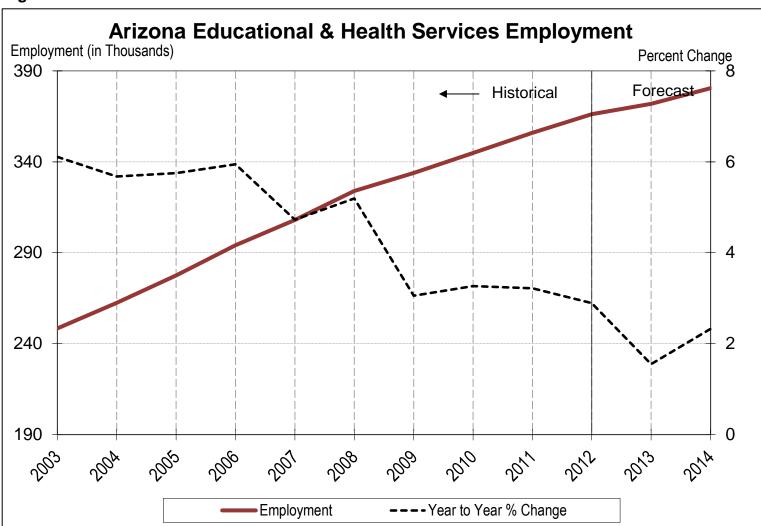


Figure 12



Figure 13

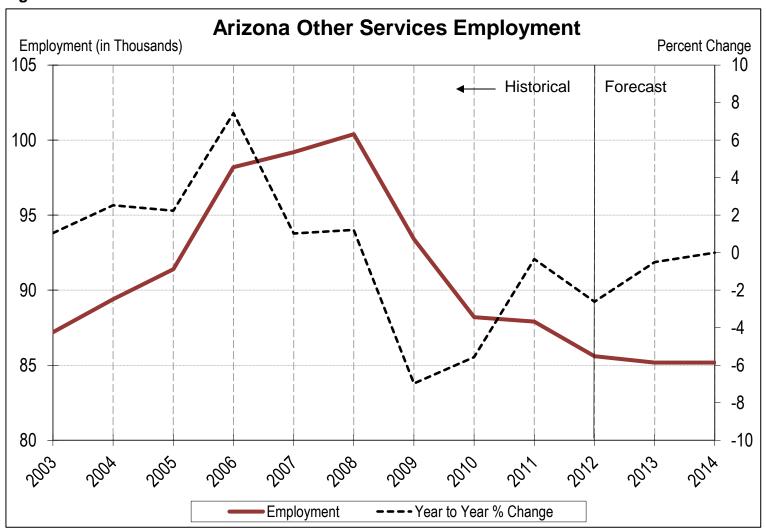


Figure 14

